



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/519,006

05/06/2005

Jurgen Specht

DNAG-297

7209

24972 7590 05/27/2008  
FULBRIGHT & JAWORSKI, LLP  
666 FIFTH AVE  
NEW YORK, NY 10103-3198

EXAMINER

ZHENG, LOIS L

ART UNIT

PAPER NUMBER

1793

MAIL DATE

DELIVERY MODE

05/27/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/519,006	<b>Applicant(s)</b> SPECHT ET AL.	
	<b>Examiner</b> LOIS ZHENG	<b>Art Unit</b> 1793	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 15 February 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 20-40 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 20-40 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Status of Claims***

1. Claims 20-21 are amended in view of applicant's amendment file 15 February, 2008. New claims 39-40 are added in view of the amendment. Therefore, claims 20-40 are currently under examination.

Note: The new claims are listed as claims 29-30 in the claim amendment filed 15 February 2008. However, since claims 29-30 already exist, the examiner assumes a typographical error occurred and applicant intended to number the new claims as claims 39-40.

In addition, new claim 39 recites "wherein the range of free acid is from 0.1 to 0.25 g/l". Since free acid is not expressed in "g/l", the examiner assumes that this limitation is indented for free fluoride concentration. This Office Action will address claim 39 based on this interpretation.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claim 40 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. In this case, claim 40 recites an open ended range

of at least 0.5g/l for at least one complex fluoride. The instant specification teaches that the total content of silicon and/or boron complex fluoride is 0.01-8g/l. Therefore, the instant specification does not support any one of complex fluoride concentration higher than 8g/l. The claimed range as recited in claim 40 is much broader than the range disclosed in the specification, which renders new matter.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 20-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sobata et al. US 5,308,413(Sobata).

Sobata teaches a process for applying a first zinc phosphating solution to metal surfaces, such as aluminum based surfaces, followed by precipitating and removing the aluminum ions in first zinc phosphating solution by adding simple fluoride, and applying the zinc phosphate solution without after the removal of aluminum ions to the metal surface again as a second zinc phosphating solution to produce a protective coating on the metal surface without the presence of aluminum fluorocomplex on the metal surface(abstract, col. 10 lines 26-32, col. 14 line 60 - col. 15 line 45).

The first zinc phosphating solution as taught by Sobata is an acidic solution(col. 4 lines 55-56) and comprises 0.3-1.5g/l of zinc ions, 10-30g/l of phosphate ions(col. 6 lines 24-40), 200-300mg/l of simple fluoride such as NaF, KF, and complex fluoride

Art Unit: 1793

such as  $\text{H}_2\text{SiF}_6$  and  $\text{HBF}_4$ , wherein the molar ratio between the complex fluoride and the simple fluoride is  $\geq 0.01$  (col. 4 lines 21-49). Sobata also teaches the addition of accelerators such as 0.1-4 g/l of metal-nitrogenzenesulfonate ions (i.e. nitrogen-containing compounds), 0.5-10g/l of hydrogen peroxide (col. 6 lines 36-38) and 0.2-5g/l of chlorate (col. 7 lines 33-35). Sobata further teaches that the aluminum ion concentration in the first phosphate solution is maintained to not exceed 150ppm by removing dissolved aluminum ions via precipitation (col. 8 lines 43-50). Sobata further teaches that 0.1-3g/l of manganese and 0.1-4g/l of nickel can be added to the phosphating solution (col. 7 lines 10-25). And 0.1-15g/l of nitrate ions can also be added to the phosphating solution (col. 7 lines 31-35). Sobata further teaches that the free acid of the coating solution is preferably adjusted to 0.5-2.0 (col. 6 lines 38-40). Table 1 of Sobata further shows that the total acid values for the examples of Sobata are 22.4 or 22.5. Lastly, Sobata teaches that the zinc phosphate solution is applied at a temperature of 20-70°C (col. 11 lines 3-6).

Regarding claims 20-26, 30, 32, 35-37 and 39-40, the component concentrations, such as zinc ions, phosphate ions, simple fluoride, complex fluoride (i.e. calculated from disclosed ratio of complex fluoride to simple fluoride), sodium and potassium (i.e. both calculated from the concentration of simple fluoride), dissolved aluminum ions, accelerators such as nitrogen-containing compound, chlorate and hydrogen peroxide, and nitrate ions, the free acid and total acid levels, the pH level, and the coating temperature range as taught by Sobata either read on or overlap the claimed component concentrations, free acid/total acid, pH levels and coating

Art Unit: 1793

temperature range. Therefore, a prima facie case of obviousness exists. See MPEP 2144.05. The selection of claimed free/complex fluorides, aluminum ions, hydrogen peroxide, free acid/total acid and pH ranges from the disclosed ranges of Sobata would have been obvious to one skilled in the art since Sobata teaches the same utilities in its disclosed free/complex fluoride, aluminum ions, hydrogen peroxide, free acid/total acid and pH ranges.

In addition, even though Sobata does not explicitly teach the claimed coating weight, one of ordinary skill in the art would have varied the coating application time via routine optimization to achieve desired coating weight as claimed since coating weight depend on the application time duration(i.e. the longer the coating is applied the higher the coating weight).

Regarding claims 27-29, 31 and 33-34, since instant claims 27-29 and 31 recite that virtually none of dissolved  $\text{Fe}^{2+}$ , complex  $\text{Fe}^{3+}$ , silver, copper, titanium, zirconium, sulfate and chloride ions are present in the claimed phosphating solution and instant claims 33-34 recite magnesium in the amount of not more than 1g/l and not more than 0.15g/l, the examiner concludes that the instant claims does not require the presence of these components in the phosphate solution. Therefore, the phosphating solution of Sobata meets these limitations.

Regarding claim 38, Sobata further teaches that the metal to be treated can be a car body(col. 14 lines 35-39 and 64).

### ***Double Patenting***

6. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the

Art Unit: 1793

unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

7. Claims 20-37 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-15, 17-22 and 34 of copending Application No. 10/467,850(App’850). Although the conflicting claims are not identical, they are not patentably distinct from each other because App’850 teaches a metal phosphating process utilizing a zinc phosphate solution that is substantially the same as the claimed zinc phosphating solution with overlapping component concentration ranges.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

8. Claims 20-37 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 27-42 and 44 of copending Application No. 10/555,929(App’929). Although the conflicting claims are not

identical, they are not patentably distinct from each other because App'929 teaches a metal phosphating process utilizing a zinc phosphate solution that is substantially the same as the claimed zinc phosphating solution with overlapping component concentration ranges.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

9. Claims 20-38 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 14-17 and 22 of copending Application No. 11/483,111(App'111). Although the conflicting claims are not identical, they are not patentably distinct from each other because App'111 teaches a metal phosphating process utilizing a zinc phosphate solution that is substantially the same as the claimed zinc phosphating solution with overlapping component concentration ranges.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

### ***Response to Arguments***

10. Applicant's arguments filed 15 February 2008 have been fully considered but they are not persuasive.

In the remarks, applicant argues that Sobata does not explicitly teach the claimed free acid KCl range of 1.6 to 2.8.

The examiner does not find applicant's argument persuasive since Sobata teaches free acid range of 0.5-2.0(col. 6 lines 38-40). Although Sobata does not



Art Unit: 1793

explicitly teach that its free acid range is determined by adding KCl, due to the similarities between the coating solution of Sobata and the instant invention, the examiner concludes that the corresponding free acid KCl in the coating solution of Sobata would have still overlapped or at least been very close to the claimed free acid KCl range. Therefore, based on MPEP 2144.05, a prima facie case of obviousness exists.

Applicant further argues that features of new claims 39-40 are not disclosed by Sobada.

The examiner does not find applicant's argument persuasive for the same reasons as stated in the rejection ground set forth in paragraph 3 above.

### ***Conclusion***

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

Art Unit: 1793

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lois Zheng whose telephone number is (571) 272-1248. The examiner can normally be reached on 8:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on (571) 272-1244. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Roy King/  
Supervisory Patent Examiner, Art  
Unit 1793

LLZ  
5/15/08